



Wyoming Game and Fish Department

Pinedale Region Angler Newsletter

Volume 14

2020

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Fish Management in the Pinedale Region

Welcome to the 2020 Pinedale Region Angler Newsletter! We had another great year and are here to share many of the management, habitat and culture highlights from 2018 and 2019.

As always, please feel free to contact us with any comments or questions about the aquatic resources in the Upper Green and Lower Bear River drainages of Wyoming. Your input is important to us as we manage these resources for you, the people of Wyoming. You'll find all of our contact info on the last page of this newsletter. Thanks for a great 2019 and happy fishing in 2020.

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New Fork River Restoration Work Coming in 2020

The New Fork River is one of the renowned fisheries in the Pinedale region, drawing anglers from across Wyoming and neighboring states to pursue its abundant brown and rainbow trout. Angler use on the New Fork River is often concentrated in sections above the East Fork confluence, and particularly on the floats between Pinedale and Boulder. This is likely due to a combination of their proximity to Pinedale and the better habitat conditions in these reaches. In the lower New Fork, over-widened and shallow reaches with little pool habitat or bank cover are the norm, and bank stability and fish habitat is poor.

The Wyoming Game and Fish Department (WGFD) in Pinedale has focused on improving fish habitat in these reaches to increase fish populations, as well as improve access opportunities to river. The Aquatic Habitat Section has been working for a couple years to design, plan, and fundraise for two projects on the New Fork River that will be constructed during 2020. These two projects highlight the approach that the WGFD has taken to enhance fishing opportunities in the New Fork River and restore stream habitat in this valuable stretch of water.



The New Fork Gas Wells site is located about 5 miles downstream of the East Fork River confluence on Bureau of Land Management (BLM)-managed lands. While over 75% of the New Fork River's watershed is public land, the river corridor itself is over 85% privately owned. The 2-mile section of river that flows through the Gas Wells site is a mix of both. Historically, a boat access was located at the site but due to erosion of the river, the launch was lost over a decade ago. A number of years ago, the WGFD teamed up with Trout Unlimited and the BLM to make this project possible, and these agencies have been working to get all the necessary pieces in place for this multi-phased project. Work in 2020 will focus on reconstructing the boat launch and access facilities as well as completing about 2/3 mile of river restoration upstream from the access. We hope that these access facilities in concert with improved stream habitat at the site will create quality angling opportunities in this area.

Downstream of the Gas Wells, the WGFD is working with a private landowner to do bank stabilization work on a meander bend about a mile downstream of the Remmick Access. In this project, one side of the river is private land, and the opposite bank is BLM. The project will work to address bank instability along ~1600 feet of the New Fork to improve riparian wetland function and enhancing fish habitat. This project is also set to break ground in 2020, with Game and Fish heavy equipment crews doing most of the work. Because so much of the river corridor is private lands, the WGFD recognizes the pivotal role that private landowners play in river stewardship, and we hope this project is a springboard for similar work throughout the river corridor.

The New Fork River is a relatively large river to be attempting in-stream restoration projects. Because of this, the WGFD and project partners will take a hard look at structures built in both of these projects to see what strategies work and what strategies need to be revisited. Learning from these outcomes, the WGFD will make any necessary revisions to guide restoration in the remainder of the 1 1/3 miles of the river for subsequent phases of the New Fork Gas Wells project.

We hope these projects represent the tip of the iceberg of a larger effort of river restoration across the entire New Fork River. This watershed will be a priority for the Game and Fish for the next 10-20 years, so the work in 2020 is very exciting, and we hope anglers start seeing benefits quickly. Volunteer opportunities abound to get involved with these projects and include revegetation work or just the chance to see how these projects come together. If you are a landowner that is interested in river health in the New Fork (or elsewhere), please contact the Game and Fish office to see what you can do to help out.

-Luke Schultz

Kokanee Fishing has Never Been Better in Wyoming

Kokanee Salmon are rapidly becoming one of the most sought after gamefish in Wyoming. Every summer, anglers from across Wyoming and many neighboring states converge on the large lakes and reservoirs that hold abundant Kokanee populations to pursue these captivating fish.



Kokanee are a landlocked form of Sockeye Salmon that are native to the northern Pacific Ocean. Unlike the Sockeye, that spends its life in the ocean before returning to freshwater to spawn and die, the kokanee spends its entire life in freshwater. Somewhat like Sockeye, Kokanee spend almost their entire life in a lake or reservoir before maturing and spawning in one of the feeder streams or creeks that connect to the lake. Likewise, once a Kokanee matures and reproduces, they will die and complete their circle of life. After hatching, the millions of small Kokanee fry will migrate downstream and begin life in the lake or reservoir their parents originated from.

Kokanee are predominantly planktivorous, meaning they feed exclusively on microscopic plants and animals that occupy the open water environments of large lakes – plankton. The planktivorous diet of Kokanee makes them a favorite among many anglers who prefer the fat, bright colored flesh the plankton produces. Keratins found in the shells of microscopic plankton gives the kokanee their distinct, orange or pink colored meat.

Catching Kokanee can often be a bit more challenging than other species of trout and salmon. Because they feed exclusively on plankton, Kokanee are not as willing to strike traditional forms of lures or bait. Often, the only way to target Kokanee is to utilize a boat to access the deepest parts of a lake or reservoir and troll or jig for schools of feeding fish. Successful Kokanee anglers frequently use advanced sonar and lake bathymetry to locate prospective fishing grounds. Once they are located, catching Kokanee might require multiple attempts with various lure colors and boat speeds to finally entice an aggressive strike. Despite the challenges associated with catching them, most Kokanee anglers will agree that their erratic fighting behavior and tasty reward make them one of the most popular game fish in Wyoming.

Anglers in the Pinedale Region are fortunate to have multiple quality Kokanee fisheries in close proximity. Most local anglers probably recognize Flaming Gorge and Fontanelle Reservoir for their quality Kokanee fishing a short distance away, but equally good Kokanee fishing exists right next door. Boulder Lake, New Fork Lake, and Lower Green River Lake all contain abundant populations of Kokanee. Anglers can usually catch Kokanee in any of these lakes throughout the year, but early and late summer seem to produce the best results. During early summer, Kokanee are usually located in shallow water, 5-15 feet from the surface, and can be caught by long-lining small spinners, flies, or plugs. Later in the summer as fish begin to stage for spawning, large schools can usually be located in 20-40 ft of water near the inlets of any creek or stream. Jigging or trolling bright colored spoons with flashers or dodgers can produce consistent action once fish are located.

Managing quality kokanee fisheries can be a challenging prospect in Wyoming. Maintaining abundant Kokanee in lakes and reservoirs is a delicate balance between multiple factors, including predation, reproduction, climate, and angler harvest. The Department works hard through our Fish Management and Fish Culture programs to keep Kokanee populations at desirable levels for anglers to enjoy. Thanks to advancements in our ability to raise and manage Kokanee in Wyoming, fishing has never been better, so get out and enjoy some of the many opportunities that exist.

- Darren Rhea

Grayling in the Pinedale Region

Arctic Grayling are native to North America, but not the Green River Drainage of Wyoming. In the lower 48, Grayling were native in Yellowstone Park in Wyoming, Montana and Michigan. Grayling are now extinct in parts of their native range, and are considered a sensitive species in Montana. Lewis and Clark called this salmonid the “silvery trout”, and their purple to silvery color and large sail-like, iridescent dorsal (top) fin, give them a striking appearance. The first introduction to waters in the Pinedale area was in the 1940’s, and they have been stocked into numerous lakes over the ensuing years. Grayling prefer cold, clear water in lakes and streams, which are readily available in Wyoming. Several lakes within the Pinedale Region provide anglers an opportunity to catch a Grayling. Most waters will require some hiking or horse packing, but they certainly worth the effort. Some lakes that offer a chance for this beautiful fish include:

Meadow Lake. This lake lies on the west slope of the Wind River Mountains in a small drainage between Halfmoon and Burnt lakes. You can access the lake by vehicle about 13 miles southeast of Pinedale. Public and private land surround the lake so make sure to review a land management map. Historically the lake was known for producing nice sized grayling, some over 16 inches. In recent years, the population has become a bit too abundant, which has resulted in more fish but a decrease in their average size.



Coyote Lake. At an Elevation of 9,533 feet, Coyote is a hike of about 7 miles from the Boulder Lake Campground. The lake is around 23 acres and located near the headwaters of a small tributary stream to Boulder Creek in the Bridger Wilderness. Recent surveys have found grayling up to 15 inches long.

Cross Lake. This lake is situated in a small basin right next door to Coyote Lake. It is a small lake of 13-acres surrounded by meadows, granite, and open timber. Camping sites and forage for livestock are available but not overly abundant. Recent surveys have found abundant grayling with maximum size around 13 inches.

Ruff Lake (Blueberry Lake) is a 54-acre lake located just inside the Bridger Wilderness boundary a short distance from the Boulder Lake Campground. Grayling in Ruff Lake are rare and the only source is downstream migration from Coyote Lake or limited spawning during high snowpack years.

Lake Creek Lake #1 (Coyote), Lake Creek Lake #2, and Trail Lake These three lakes are located in the Trail Lake Creek sub-basin of the Willow Creek drainage. The Spring Creek trailhead provides the easiest and shortest access. Lake Creek Lake #1 (elevation 9,678 feet), also known as Coyote Lake, has an abundant population of grayling. Lake Creek Lake #2 (elevation 9,751 feet) and Trail Lake (9,754 feet) once supported Grayling, however it is unknown if they are still present.

Section Corner Lake is also located in this drainage at an elevation of 9,245 feet. The 55-acre lake is surrounded mostly by timber. Access is by backpack or horsepack and is about 7 miles from the Spring Creek Park trailhead. Section Corner supports a healthy population of grayling, with some over 15 inches.

Grayling are stocked in CCC Pond and Pinedale Kids Pond when excess fish become available. These waters provide a great opportunity for anglers to catch a unique and beautiful fish.

Because of their beauty and willingness to strike, Arctic Grayling provide a unique opportunity to anglers. Though there are not many lakes in the Pinedale area with grayling, and access can be difficult, the opportunity to catch and photograph one of these salmonids is worth it.

- Hilda Sexauer

Game and Fish Explores Angler Use and Commercial Guiding on Large Rivers

Interest in regulating guided angling trips on large rivers in Wyoming has been growing. During the 2019 and 2020 legislative sessions, bills were introduced that would have directed the Wyoming Game and Fish Department (WGFD) to either study the effects of commercial guiding or regulate guided angling in Wyoming. Though both attempts ultimately failed in the State Legislature, ongoing interest in the subject will likely continue.

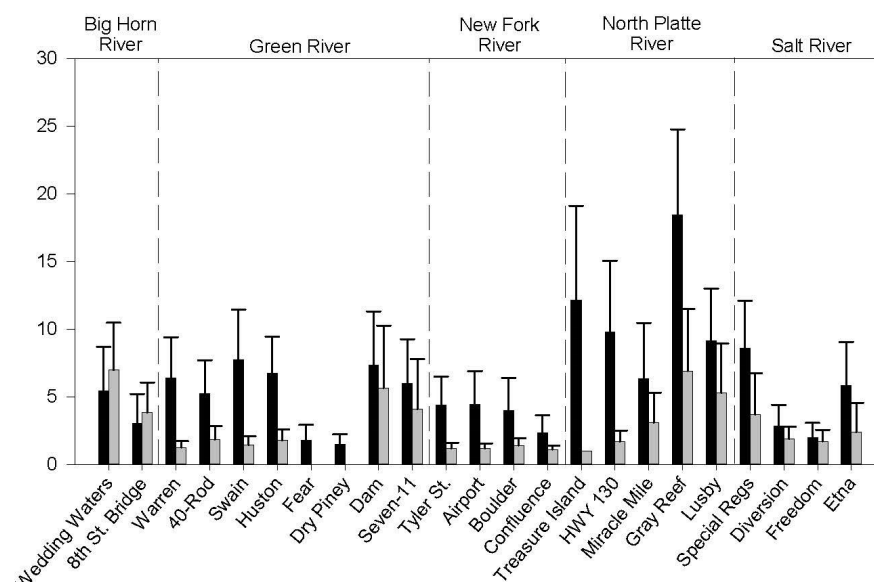


Most of the interest and speculation around guided angling pressure in Wyoming is centered on the largest and most prominent rivers, which provide the vast majority of non-motorized boat angling opportunity in the state. These rivers also tend to be among the most productive fisheries in Wyoming and have gained regional and national notoriety. Speculation has increased in recent years that angling pressure, in particular, float angling pressure, has, or will impact these important resources.

Historically, the WGFD relied largely on intermittent creel surveys to monitor angling pressure and angler demographics on many of the large rivers in Wyoming.

These surveys have become cost prohibitive and less frequent due to the large investment in man-power and time, and the need for aerial flights to conduct angler counts. As interest in angling pressure on large rivers has increased, so has the need to develop cost-effective, repeatable, and easy ways to quantify and monitor trends in angler use. During the 2019 field season, the WGFD implemented a statewide project to collect data on angler use on many of the large rivers in the state. This project involved the use of remote, time-lapse cameras to quantify the amount of angling pressure occurring on large rivers.

During the months of July and September, the WGFD operated time-lapse cameras at 23 locations on five large rivers, including the Big Horn, Green, New Fork, North Platte and Salt rivers. Cameras were positioned to capture images of boats as they drifted down the river. Biologists were then able to review the time-lapse images and determined how many boats and anglers were using each segment of river. We also implemented a system of angler interviews to coincide with the data collection to determine the amount of commercial guide use that was occurring on each river segment.



Average number of fishing boats per day observed on 23 different river segments on five major rivers in Wyoming during the months of July (black) and September (gray), 2019.

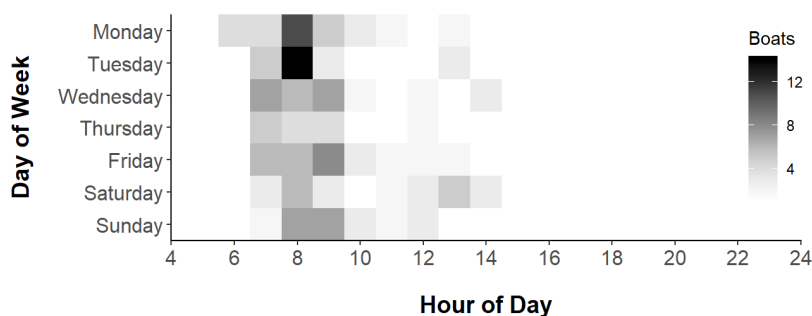
Angler Use (cont.)

Over 2 million images were collected and reviewed in 2019, along with over 1100 angler interviews to determine patterns of use on the major rivers in the state. The highest amount of boat use occurred on the Big Horn River near Thermopolis. Most of these boats were inner tubes and other recreational craft. The highest amount of angling use occurred on segments of the North Platte River near Saratoga and Casper. Average angling use per day on the Grey Reef and Treasure Island reaches exceeded ten boats per day in July. Use on other river segments in the state was considerably lower. On most river segments, the average amount of angling use was 5-10 boats per day.

Commercial guiding use represented less than half of the recorded angling trips on all rivers except the Upper Green River near Pinedale, and the North Platte River near Casper (Figure 2). The vast majority of guides operating in Wyoming were residents. Almost all of the guides interviewed were local to the river they were guiding on; the one exception was the Green River, where most guides (80%) were from outside of the county.



One interesting phenomenon that the time-lapse cameras revealed was the time of day that boats were seen entering and leaving the river. On the Green River, for example, the majority of boats were seen launching within one hour of each other and later seen exiting the river within a relatively short amount of time. This observed pattern of use may help explain some of the perceived crowding issues that are frequently cited by river anglers. That is, boats that launch within close proximity to each other and spend the day floating the river together, will perceive the river to be crowded, even if average use is 5-10 boats per day.



Plot of launch times recorded at the 40-Rod Access on the Green River during July 2020, showing the concentration of boats entering the water within a 1-hr period on either side of 8 am.

Overall, boat use on many of the largest rivers in Wyoming was low during the month of July. Average use was typically 5-10 boats per day on most reaches, with the exception of the North Platte River. By September, boat-angler use had all but disappeared, particularly on rivers in western Wyoming such as the Green, New Fork and Salt rivers. This data provided many valuable insights into boat use patterns across the state on many important river and will be a useful tool for monitoring changes in the future.

- Darren Rhea

Mountain Whitefish: Wyoming's Other Sportfish

When most anglers think about western Wyoming, their thoughts likely turn to one or more of our fine trout fisheries. Lake Trout, Rainbow Trout, Brown Trout, Brook Trout, and Cutthroat Trout can all be found in many different waters, and all provide great opportunities for anglers. A close relative of these species is abundant in many of the same waters where trout are found, but many anglers overlook it: the Mountain Whitefish. Like other trout, the Mountain Whitefish puts up a good fight when caught on hook and line, but often doesn't get the credit they deserve as a worthy quarry for anglers.

Since Mountain Whitefish tend to live in large groups, anglers can catch many fish from a single pool. Another characteristic of this species that is a benefit to anglers is their high densities and similar size to trout in many waters. For example, in the Smiths Fork River above Cokeville, population estimates for whitefish have exceeded estimates for trout every year they have been calculated. A similar situation occurred on the New Fork River at the Airport Access Area, where population estimates for Mountain Whitefish obtained in 2013, were higher than either of the estimates of trout obtained in 2014 and 2016. Whitefish are also typically larger than trout. Average size of whitefish (13.8") was larger than the average size of trout from either of their estimates (12.4" and 11.2", respectively).



Mountain Whitefish have a small, downturned mouth, and tend to spend most of their time deep in the water column. Therefore, anglers should use flies, small lures, or bait, and some weight in order to get their offering down deep. Fly anglers often find success with nymphs, both because those flies can be kept near the bottom of the river, and because they are good imitations of the aquatic insects that are favored by whitefish. Late fall and winter are particularly good times to catch whitefish for those anglers lucky enough to have access to ice-free sections of rivers in this area.



Many anglers think Mountain Whitefish won't make good table fare, due to their large scales and abundant bones. However, Whitefish weren't always shunned by anglers in this area. For example, from 1975-79, a creel survey on the Upper Green River showed that Mountain Whitefish comprised up to 25% of the fish harvested, even though catch rates for trout were much higher. Those anglers that harvested Whitefish knew that the flesh of Whitefish is actually quite tasty. If the filets are properly prepared, they can be broiled or fried and have a similar flavor to trout. Smoked Whitefish is also very popular among fans of this feisty fish.

Since Mountain Whitefish are often more abundant and larger than the average trout in many areas, and they put up a good fight at the end of fishing line, they certainly live up to their classification as a sportfish. In addition, they can provide a fine meal at the end of the day. Given all of these qualities, perhaps you should set your sights on Mountain Whitefish next time you decide to wet a line.

- Pete Cavalli

Statewide Spawning Crew Operations in 2019

2019 was a busy year for the Statewide Spawning Crew. Some region highlights include the following projects:

Early May we completed a milt infusion spawn of wild, genetically pure Bear River Cutthroat Trout with captive females housed at the Wigwam Fish Hatchery. This process is completed by electrofishing Huff Creek near Cokeville, Wyoming to collect adult male Bear River Cutthroat. Once enough males were collected we then collected the milt of these males into individual vials, which were crossed with captive female Bear River Cutthroat trout. In total 15 pairs were crossed resulting in 5,250 eggs infused with wild male genetics to contributed to the genetic diversity of the captive Bear River Cutthroat broodstock.



Soon after the infusion work was finished, we quickly started our annual Grayling trapping and spawning operation at Meadow Lake. This operation was conducted during the month of May. In total, we completed four spawns for 1,087,936 eggs collected.



After spring spawning operations were completed Spawning Crew began finalizing the coordination efforts and conducting the annual high alpine helicopter stocking. This year we stocked 47 waters in the Cody, Jackson, Lander, and Pinedale regions.

In the fall of 2019, the Spawning Crew trapped Kokanee Salmon at New Fork Lake. This year the Kokanee were large. Sufficient fish ran the trap to meet the statewide early run Kokanee egg quota. In total, we collected 529,662 eggs from three spawns. In addition to New Fork Lake, the Spawning Crew collected eggs from Rob Roy Reservoir and from Sheep Creek, Utah, and the Henry's Fork River in Wyoming. In total 2.7 million eggs were collected at the various Kokanee spawning operations.

- Kristopher Holmes





**Wyoming Game and
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*Conserving Wildlife-Serving
People*

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Important Dates to Remember in 2020

- **March 1– Nov 30** All watercraft entering Wyoming are required to be inspected for Aquatic Invasive Species.
- **May 1– Soda Lake, Meadow Lake, and Burnt Lake** open to fishing at 8 a.m.
- **June 6— Kids Fishing Day and Wyoming's Free Fishing Day** The Wyoming Game and Fish Commission has declared June 6, 2020 Free Fishing Day to coincide with the beginning of the National Fishing and Boating week. Residents and nonresidents may fish Wyoming waters (excluding Wind River Indian Reservation and Yellowstone National Park) without a fishing license or conservation stamp. Free Fishing Day will also coincide with Kids Fishing Day in Pinedale where WGFD employees will be present to help with fishing and provide rods to those that don't have them.
- **November 15—Soda Lake and Burnt Lake** closes to fishing.
- **November 21—Meadow Lake** closes to fishing.

We welcome all questions and comments on this newsletter or about the fisheries resources within the Pinedale Region. Please feel free to contact us or send an email to:

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